POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1954

U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

Page

1 - 2 Water Supply Outlook: Below average water supplies for most areas with late season shortages expected for all except the earliest water rights. Storage water will be barely adequate this year.

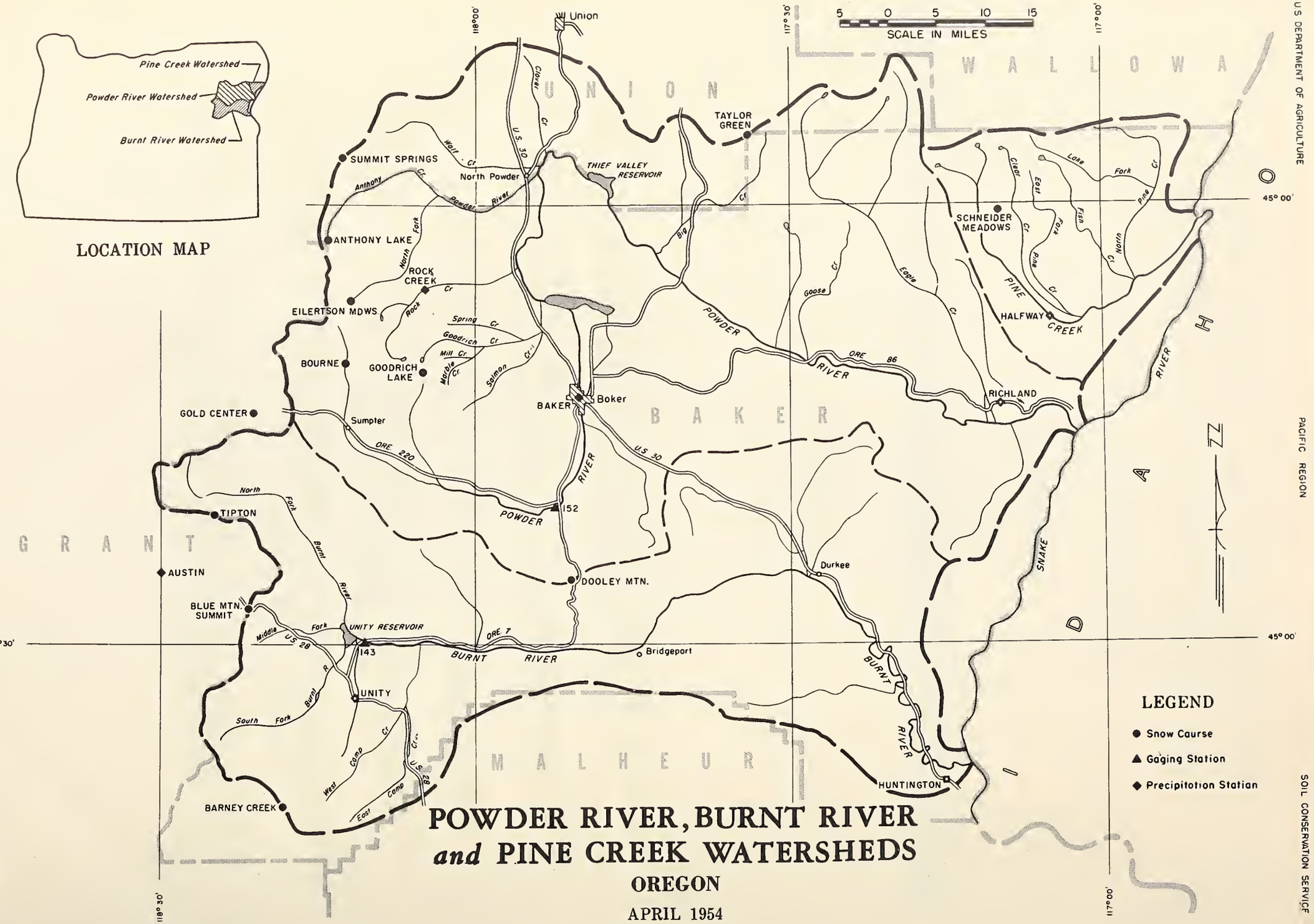
2 Streamflow Forecasts: The Powder is forecast to flow 77 percent of the 10 year average and Burnt River 60 percent of average. Flow of North Powder, Eagle and Pine Creeks will be below average.

2 Reservoir Storage: Stored water in Unity and Thief Valley reservoir was reported as about average and satisfactory for this season.

3 Snow Cover: This year's snow-pack varies from 75 percent average on the Burnt to 88 percent average on Pine Creek. On the Powder the snow-cover is 85 percent average.

3 Soil Moisture: Soils up to 4000 feet are fairly dry. At higher elevations they have improved somewhat over the abnormally dry situation of last season.

4 Precipitation: Fall precipitation was 59 percent normal; while winter precipitation was 70 percent normal. September through March precipitation was 67 percent normal.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

APRIL 1954

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

PACIFIC REGION

AGR.-SCS-PORTLAND, ORE. APRIL 1954

7-O-14467-L

WATER SUPPLY OUTLOOK - For April-September, 1954 [a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover is slightly below last year and average.
Big Creek	3,986	Only enough water for one irrigation. Snow-cover is 62 percent of last year 75 percent average.
Burnt River	27,448	Sufficient water for all lands except on the North fork where late season shortages will be experienced. Snow-cover is 75 percent average and only 61 percent of last year.
Clear Creek	3,570	Less irrigation water than last year. Snow-cover is about half of last year's cover.
Eagle and Goose	10,449	Less irrigation water than last year. Snow-cover is 69 percent of last year and 89 percent of average.
Fish Creek and Lake Forks	1,463	Less water than last year. Snow-cover is about half of last year's cover.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for one irrigation. Snow-cover is 79 percent of last year and 90 percent average.
McMullen Slough	1,800	Less water than last year for irrigation. Snow-cover is 69 percent of last year.
Pine Creek	11,381	Less irrigation water than last year. Snow-cover is 89 percent average and 69 percent of last year. Dry Gulch area will be short of water.
Pine (East) Creek	1,363	Less irrigation water than last year. Snow-cover is about half of last year's cover.
Powder River	43,980	Adequate for lands served from Thief Valley reservoir but short supplies for late water rights especially late in the season. Snow-cover is 85% percent average & 74 percent of last year.
Powder (North) River	18,146	Sufficient water for one irrigation. Snow-cover is 88 percent of last year and about 85 percent average.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Sufficient for one good irrigation on all lands. Late rights will suffer late in the season. Snow-cover is 66 percent of last year.
Salmon Creek	1,200	Sufficient water for one irrigation. Snow-cover is 79 percent of last year.
Spring Creek	290	Sufficient water for one irrigation only.
Wolf Creek	3,515	Sufficient water for one irrigation only. Snow-cover is 82 percent of last year.

STREAMFLOW FORECASTS[a] - As of April 1, 1954

Gaging Station No.	Name	Seasonal Streamflow- 1000 a.f. Forecast 1954 Apr:Sept.	Apr-July	Avg. 1942-51	1954 as % of Avg
143	Burnt River near Hereford*	27.0	— —	45.1	60
152	Powder River at Salisbury	50.0	— —	64.7	77
152	Powder River at Salisbury	— —	48.0	62.7	77

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1954 1954	1953	10 yr. Avg. 1942-51	1954 as % of yr.Avg.
Unity	25.2	15.4	14.9	13.7	112

SNOW COVER - As of April 1, 1954

Snow Course No.	Name	Elev.	1954 Snow Depth (in)	1954 Water Depth (in)	Water Content (in) 1953	Water Content (in) Average	1954 as % of Avg
-	below 5500'	-					
141	Blue Mtn. Sum.	5098'	15.5	5.3	10.0	7.8	68
156	Dooley Mtn.	5430'	14.7	4.4	11.6	9.2	48
151B	Eilertson Mdws.	5400'	30.8	10.2	15.4	12.1	84
249	Gold Center	5340'	31.8	12.5	15.5	12.2	102
161	Schneider Mdws.	5400'	66.4	27.0	39.3	30.5	89
142	Tipton	5100'	21.2	7.2	11.3	9.8	73
	Average		--	11.1	17.2	13.6	82
-	5500' to 6000'	-					
143	Barney Cr.	5950'	22.3	6.0	8.8	9.3	65
154	Bourne	5800'	40.2	15.8	20.6	16.0	99
185	Taylor Green	5740'	35.8	12.8	20.5	17.0	75
	Average		-	11.5	16.6	14.1	82
-	Above 6000'	-					
155	Anthony Lake	7125'	75.2	26.7	30.7	27.9	96
157	Goodrich Lake	6775'	91.3	38.1*	48.0	42.5	90
184	Summit Springs	6000'	49.7	16.6	18.6	21.4	78
	Average		-	27.1	32.4	30.6	89
	(Average 12 Snow Courses)			15.2	20.9	18.0	84

* Partly estimated

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1954
Lower Valleys	Fairly dry	Fairly dry
Upper Valleys	Fairly dry	Fairly dry
Mountains	Nearly Normal	Dryer than normal

PRECIPITATION DATA - As of April 1, 1954

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg	Normal*	Avg as % of Normal
Austin 3S	4333	0.01	1.23	2.63 e	2.26 e	2.73	0.96	0.71	1.50	1.95	77%
Baker WB City	3446	T	0.86	1.36	1.38	0.84	0.44 e	0.72	0.30	1.17	68%
Halfway	2675	0.00	0.20	1.00	3.22	1.77	0.80	1.65	1.23	2.40	51%
Huntington	2150	0.00	0.20	0.91	2.02	1.27	0.40	0.75	0.79	1.31	60%
Richland	2215	T	0.25	0.97 e	0.75	0.55 e	0.20	0.48 e	0.46	0.95	48%
Rock Creek	4150	0.11	0.81	2.34	2.71	3.80	1.32	1.15	1.75	1.91	92%
Unity	4031	0.02	0.58	0.81	0.88	0.92	0.39	0.43	0.58	1.00	58%
Average		0.02	0.59	1.43	1.89	1.70	0.64	0.84	1.02	1.53	67%
Normal*		0.72	1.10	1.63	2.03	1.99	1.84	1.35			
Average as % of Normal		3%	54%	88%	93%	85%	33%	62%			
Fall (Sep-Oct-Nov) as % of Normal		-	59%	-							

e-estimated

*-as published USWB

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1955

U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

S U M M A R Y

Page

1 - 2 Water Supply Outlook: "Poor" to "fair" supplies of water are forecast for most areas in these basins with late season shortages foreseen for all except the earliest water rights.

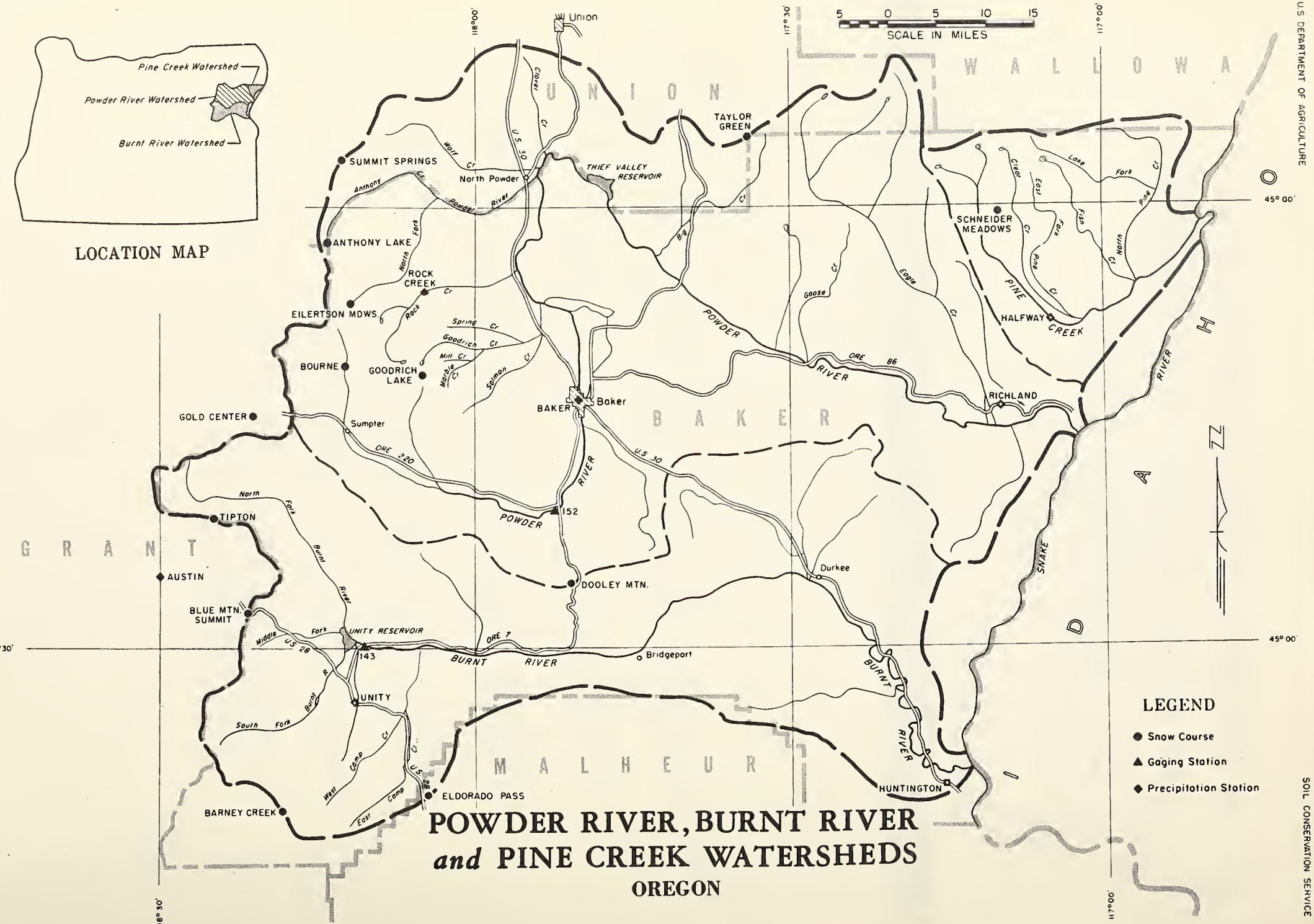
2 Streamflow Forecasts: The Powder is forecast to flow 59 percent of the 10 year average and Burnt River 52 percent of average. Flow of other streams will be proportionately low.

2 Reservoir Storage: Stored water in Unity is far below average and will not fill but should provide a sufficient supply to its users. Thief Valley reservoir is full as usual.

3 Snow-Cover: The snow-pack has a water content 94 percent average on the Burnt, 96 percent on the Powder, and 79 percent average on Pine Creek. All on very dry soils.

3 Soil-Moisture: All mountain watershed soils are extremely dry and will soak up much of the early snow-melt water.

4 Precipitation: Fall precipitation was 43 percent average and winter precipitation was 66 percent average. Abnormally heavy precipitation in early summer will be needed to improve the water outlook.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1955[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover greater than last year but watershed soils are exceptionally dry.
Big Creek	3,986	One irrigation is about all that is expected. Snow-cover slightly greater than last year.
Burnt River	27,448	Sufficient water for all lands except the North Fork if carefully used. Unity Reservoir holds a very limited supply but should provide enough for lands usually served.
Clear Creek	3,570	Less water available than for last year. Snow-cover is only 79 percent average.
Eagle and Goose	10,449	Less water than last year but no serious shortages foreseen this year.
Fish Creek and Lake Forks	1,463	Less water available than for last year Snow-cover about 89 percent of last year.
Marble Mill and Goodrich Creeks	2,780	Less water than last year but enough for one good irrigation in early season Snow-cover is about same as last year.
McMullen Slough (Pine Valley below Langren)	1,800	Less water than last year but sufficient.
Pine Creek	11,381	Snow-cover about 89 percent of last year. Water supply less than last year. Dry Gulch area will be short early.
Pine (East) Creek	1,363	Less water than last year. Snow-cover is 79 percent average.
Powder River	43,980	Forecast streamflow at 59 percent average. Snow-cover good but soils are very dry. Thief Valley Reservoir has full supply of water.
Powder (North) River	18,146	Water about the same as last year except streamflow will fall off earlier than usual. Snow-cover little better than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for one good irrigation. Recent water rights will be short in late season. Snow-cover is some better than last year but watershed soils are all very dry.
Salmon Creek	1,200	Water for one good irrigation.
Spring Creek	290	Water for one good irrigation.
Wolf Creek	3,515	Enough water for one irrigation only. Snow-cover slightly better than last year.

STREAMFLOW FORECASTS[a]
As of April 1, 1955

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1955	Forecast Period	Avg. 1943-52	1955 as % of Avg.
143	Burnt River near Hereford*	24.0	Apr.-Sept.	46.5	52
152	Powder River at Salisbury	39.0	Apr.-Sept.	66.0	59
152	Powder River at Salisbury	38.0	Apr.-July	64.1	59

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1955 1955	1954	1953	10 Yr. Avg. 1943-52	1955 as % of 10 Yr. Avg.
Unity	25.2	4.5	15.4	14.9	12.9	35

SNOW COVER
As of April 1, 1955

Snow Course No.	Name	Elev.	1955 Snow Depth (in)	1955 Water Content (in)	Water Content (in) 1954	1953	Average	1955 as % of Avg.
---	below 5500' ---							
18E13	Blue Mtn. Sum.	5098'	30	8.2	5.3	10.0	7.7	106
17E1	Dooley Mtn.	5430'	25	7.9	4.4	11.6	8.9	89
18E3	Eilertson Mdws.	5400'	34	11.4	10.2	15.4	12.0	95
18E8	Gold Center	5340'	34	10.9	12.5	15.5	12.2	89
17D8	Schneider Mdws.	5400'	65	24.0	27.0	39.3	30.3	79
18E9	Tipton	5100'	28	10.8	7.2	11.3	9.7	111
	Average		--	12.2	11.1	17.2	13.5	90
---	5500' to 6000' ---							
18E14	Barney Cr.	5950'	22	6.7	6.0	8.8	8.9	75
18E5	Bourne	5800'	43	15.0	15.8	20.6	16.0	94
17D7	Taylor Green**	5740'	Report delayed		12.8	20.5	16.8	--
	Average		--	10.8	10.9	14.7	12.4	87
---	above 6000' ---							
18E1	Anthony Lake	7125'	71	28.5	26.7	30.7	27.9	102
18E6	Goodrich Lake	6775'	75	26.2	38.1*	48.0	41.9	63
18D10	Summit Springs**	6000'	Report delayed		16.6	18.6	21.1	--
	Average		--	27.4	32.4	39.4	34.9	79
	Average (10 Courses)			15.0	15.3	21.1	17.6	85

* Partly estimated. ** Omitted from averages.

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1955
Lower Valleys	Very dry	All watershed soils are still exception-
Upper Valleys	Very dry	ally dry except where early snow-melt
Mountains	Very dry	has wet top few inches.

PRECIPITATION DATA
1954-55

Station Name	Elev.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal *	Avg. as % of Norma
Austin 3S	4333	0.15	0.50	0.83	2.01	1.32	1.30[e]	1.39	1.07	1.95	55
Baker KBKR	3446	0.68	0.25	0.39	1.05	0.17	0.70	0.79	0.58	0.85	68
Halfway	2675	0.76	0.29	0.98	3.81	1.50	1.73	1.73[e]	1.54	2.40	64
Huntington	2150	0.25	0.07	1.01	1.45	1.27	0.26	0.19	0.64	1.31	49
Richland	2215	0.31	0.10	0.54	0.88	1.18	0.64	0.65[e]	0.61	0.95	64
Rock Creek	4150	0.84	0.51	1.23	1.67	1.46	1.27	1.85	1.26	1.91	66
Unity	4031	0.16	0.24	0.23	0.65	0.47	0.24	0.71	0.39	1.00	39
Average		0.45	0.28	0.74	1.65	1.05	0.88	1.04	0.87	1.48	59
Average Normal*		0.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		64%	26%	46%	85%	54%	49%	80%			
Fall Avg. as % of Fall Normal (Sept-Oct-Nov)			43%								

* Based on USWB data

e - Estimated

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1956

U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

S U M M A R Y

For details
see page:

1-2 Water Supply Outlook: Good to ample water supplies are forecast for this entire area with soil moisture so great that runoff will be above the average expected from usual snow-melt.

2 Streamflow Forecasts: Powder River is forecast to produce one-third above average run-off during April-September. This figure is the 7th highest volume since records began in 1904. Burnt River will flow nearly one-half more than normal and will be the 4th highest flow since 1930. Flow of other streams will be much above average.

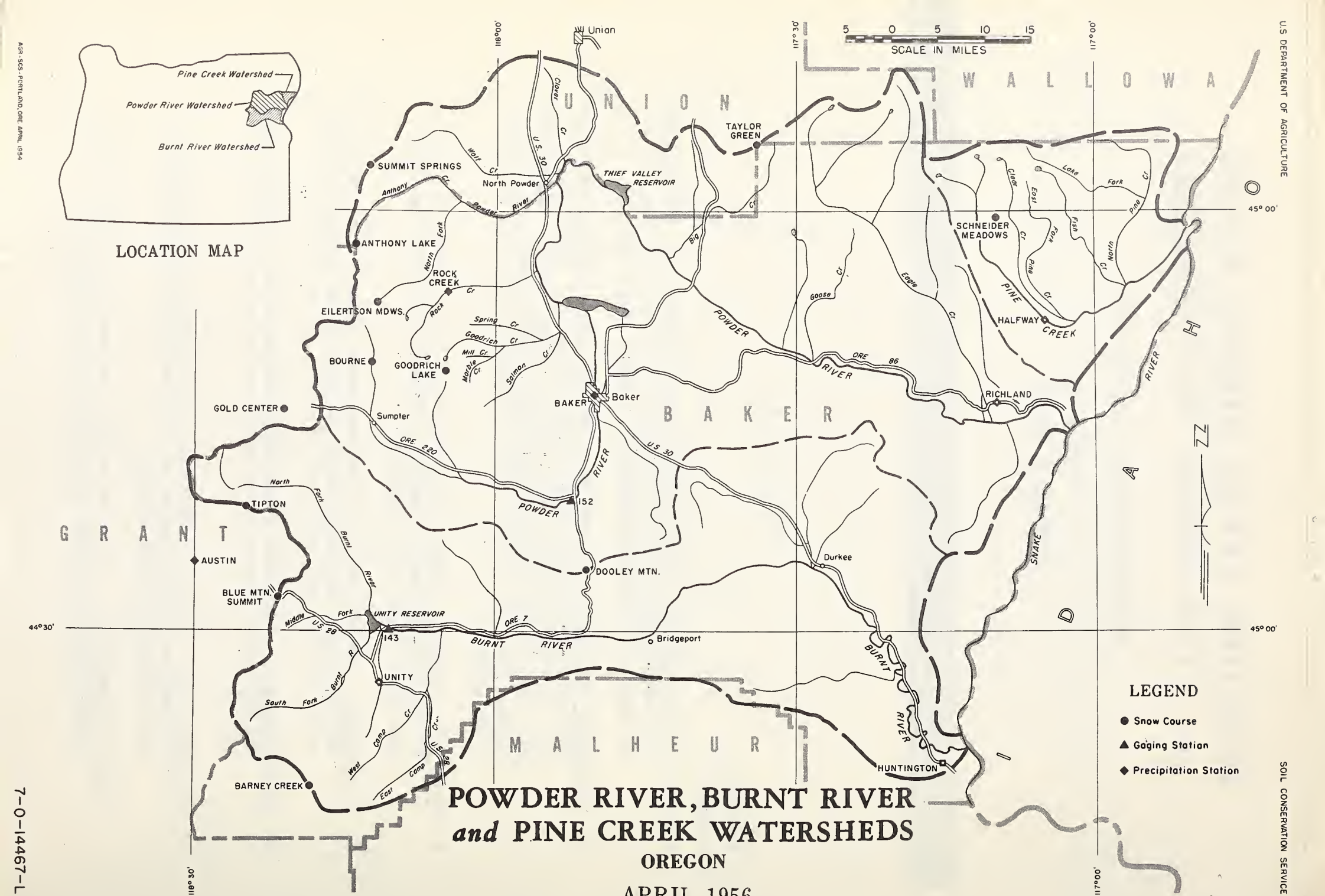
2 Reservoir Storage: Thief Valley reservoir w ill serve its lands up to capacity and Unity reservoir, although spilling now, will also have ample water supplies.

3 Snow-Cover: Water content of the snow-pack is above average throughout the area. On Powder River the snow is 126 percent average; on Burnt River and Pine Creek it is 112 percent average.

3 Soil Moisture: All soils in mountain watersheds are extremely wet and will cause snow-melt or rain-water to enter the streams rapidly.

4 Precipitation: Fall precipitation over the area was 137 percent of average. Total precipitation since September 1st has been about one-third above average.

Current Streamflow: Winter streamflow has been much above average with freshets occurring three times since January 1.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

APRIL 1956

AGR.-SCS.-PORTLAND, ORE. APRIL 1954

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1956[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Ample water for all usual irrigation. Snow-cover is much above average.
Big Creek	3,986	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Burnt River	27,448	Adequate water for all usual irrigation. For lands served from Unity Reservoir the supply should be ample. Even the North Fork should have above average flow.
Clear Creek	3,570	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Eagle and Goose	10,449	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Fish Creek and Lake Forks	1,463	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Marble Mill and Goodrich Creeks	2,780	Adequate water for all usual irrigation. Snow-cover is much above that of last year.
McMullen Slough (Pine Valley below Langren)	1,800	Ample water for all usual irrigation. River flow to be one-third above average.
Pine Creek	11,381	Adequate water for all usual irrigation. Snow-cover is much better than last year. Dry Gulch area should have good supplies.
Pine (East) Creek	1,363	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Powder River	43,980	Ample water for all usual irrigation. Flow of river will be one-third above average and will rank 7th highest since records began in 1904.
Powder (North) River	18,146	Ample water for all usual irrigation. Snow-cover is much better than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK -(Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for all usual irrigation. Late summer flow should hold up well. Snow-cover is better than last year.
Salmon Creek	1,200	Adequate water for all usual irrigation.
Spring Creek	290	Adequate water for all usual irrigation.
Wolf Creek	3,515	Adequate water for all usual irrigation. Snow-cover much above last year. Shaw Reservoir filled very early this year.

STREAMFLOW FORECASTS[a]
As of April 1, 1956

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1956	Forecast Period	15 yr Avg. 1938-52	1956 as % of 15-Yr. Avg.
143	Burnt River near Hereford*	61.0	Apr.-Sept.	41.8	146
152	Powder River at Salisbury	84.0	Apr.-Sept.	63.4	132
152	Powder River at Salisbury	82.0	Apr.-July	61.6	133

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1956 1956	1955	1954	15 Yr. Avg. 1938-52	1956 as % of 15 Yr. Avg.
Unity	25.2	18.3	4.5	15.4	14.9	123

SNOW COVER
As of April 1, 1956

Snow Course No.	Name	Elev.	1956 Snow Depth (In.)	1956 Water Content (In.)	Water Content (In.) 1955	1954	15 yr. Avg. 1938-52	1956 as % of 15-yr. Avg.
---	below 5500' ---							
18E13	Blue Mtn. Sum.	5098	28	10.1[a]	8.2	5.3	15.8	129
17E1	Dooley Mtn.	5430	27	9.1	7.9	4.4	9.1**	100
18E3	Eilertson Mdws.	5400	36	13.7	11.4	10.2	11.9	115
18E8	Gold Center	5340	39	15.9	10.9	12.5	11.9**	134
17D8	Schneider Mdws.	5400	80	33.6	24.0	27.0	29.9	112
18E9	Tipton	5100	32	11.9	10.8	7.2	9.7**	123
	Average		—	15.7	12.2	11.1	13.4	117
---	5500' to 6000' ---							
18E14	Barney Cr.	5950	25	8.9	6.7	6.0	9.4**	95
18E5	Bourne	5800	53	20.9	15.0	15.8	15.9	131
17D7	Taylor Green	5740	55	19.9	14.4	12.8	16.8	118
	Average		—	16.6	12.0	10.9	14.0	119
---	above 6000' ---							
18E1	Anthony Lake	7125	90	37.3	28.5	26.7	27.9	134
18E6	Goodrich Lake	6775	104	45.7	26.2	38.1*	41.4**	110
18D10	Summit Springs	6000	71	28.4	19.1	16.6	21.1**	135
	Average		—	37.1	21.3	32.4	30.1	123
	Average (12 Courses)		—	21.3	15.3	15.2	17.7	120

*Partly estimated. ** Average for less than 15 years of record in 1938-52 period but not less than 5 years.
[a]Telegraphic

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1,1956
Lower Valleys	At summer's end, last year, all mountain and valley soils were extremely dry. An unusual combination of heavy precipitation and early winter snow-melt has completely "recharged" all watersheds so that all soils are now extremely wet.	
Upper Valleys		
Mountains		

PRECIPITATION DATA
1955-1956

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal*	Avg. as % of Normal
Austin 3S	4333	1.30	1.43[e]	3.84	6.31	4.75	2.40	1.21	3.03	1.95	155
Baker KBKR	3446	0.99	1.03	1.93	3.46	1.15	0.73[e]	0.20	1.36	0.85	160
Halfway	2675	1.96	0.83	3.73	4.34	4.91	1.46	1.12	2.62	2.40	109
Huntington	2150	0.54	0.25	1.61	2.82	2.49	0.88	0.11	1.24	1.31	94
Richland	2215	0.95	0.40	2.34	1.67	1.45	0.86[e]	0.38[e]	1.15	0.95	121
Rock Creek	4150	1.00	2.10	3.70	6.20	3.80	3.13	1.23	3.02	1.91	158
Unity	4031	0.81	0.46	1.20	2.54	1.82	0.83	0.21	1.12	1.00	112
Average		1.08	0.93	2.62	3.90	2.91	1.47	0.64	1.94	1.48	131
Average Normal*		0.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		154	87	162	201	150	82	49			

Fall Avg. as % of Fall Normal (Sept-Oct-Nov) 137

* Based on USWB data

[e] estimated

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1957

U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details see page:

1-2 Water Supply Outlook: Fair to good water supplies are forecast for the entire area. The average amount of irrigation water can be expected.

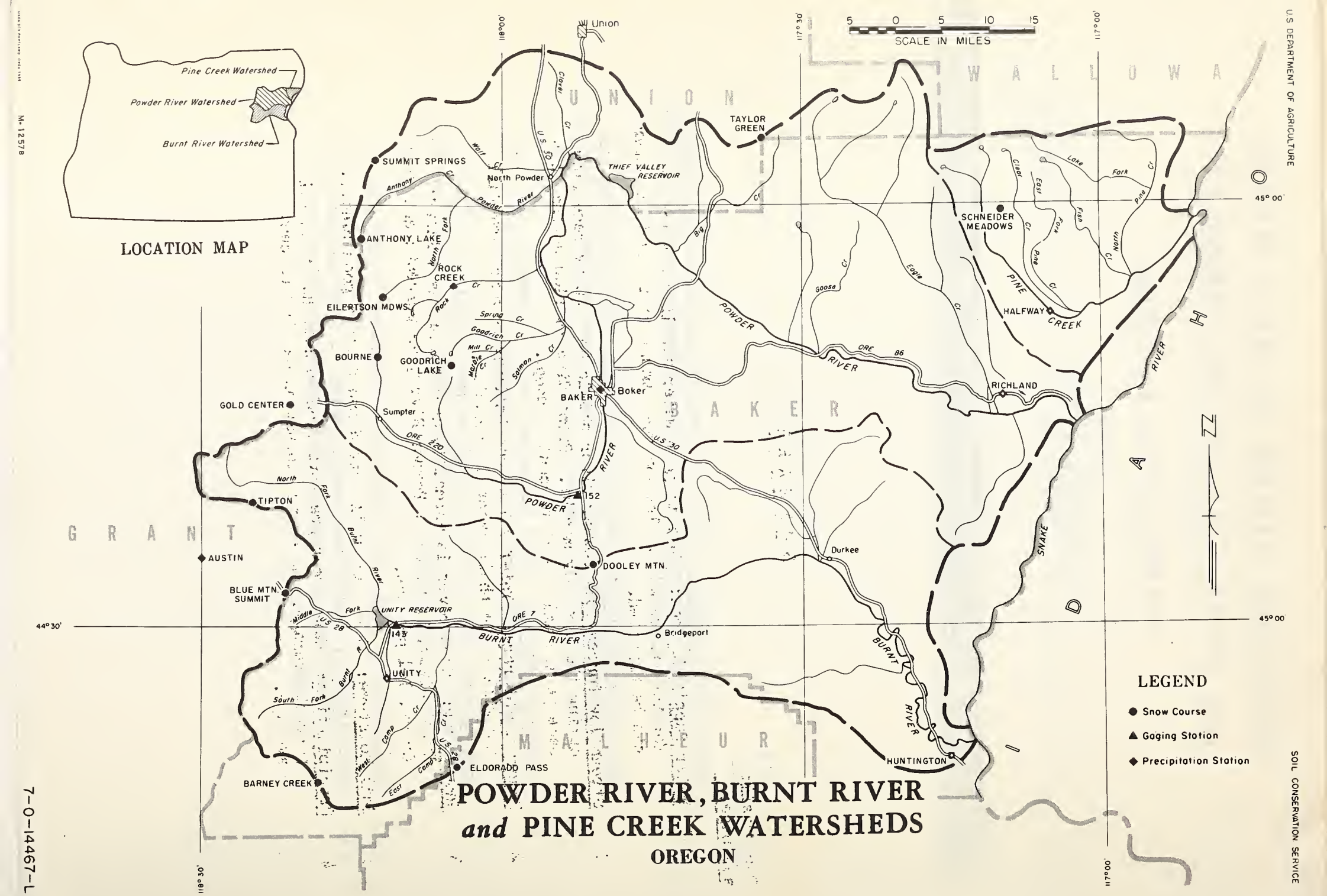
2 Streamflow Forecasts: Powder River should have an average flow during the next six months. Burnt River's flow during this same period will be 86 percent average.

2 Reservoir Storage: Thief Valley and Unity reservoirs are full and will serve their lands to capacity.

3 Snow-Cover: Snow cover is normal to near normal as follows: Burnt River, 92 percent; Powder River, 92 percent; and Pine Creek, 101 percent.

3 Soil Moisture: Soils are well wetted and favor a good runoff.

4 Precipitation: Water year precipitation to date has been 101 percent average. March precipitation was 192 percent average.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

M- 1257 B

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1957[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Adequate water for usual irrigation.
Big Creek	3,986	Adequate water for usual irrigation. Snow cover is slightly above normal.
Burnt River	27,448	Sufficient water for all lands serve from Unity reservoir. Some water shortages above the reservoir unless favorable rainfall occurs in May-August.
Clear Creek	3,570	Average water supplies expected this year.
Eagle and Goose	10,449	Average water supplies expected this year.
Fish Creek and Lake Forks	1,463	Average water supplies expected this year.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for at least one irrigation.
McMullen Slough (Pine Valley below Langren)	1,800	Sufficient for usual irrigation
Pine Creek	11,381	Average water supplies expected this year.
Pine (East) Creek	1,363	Average water supplies expected this year.
Powder River	43,980	Average water supplies for usual irrigation. Thief Valley reservoir is full.
Powder (North) River	18,146	Adequate water supplies. Snow-cover less than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for at least one good irrigation.
Salmon Creek	1,200	Enough water for at least one good irrigation.
Spring Creek	290	Enough water for at least one good irrigation.
Wolf Creek	3,515	Average water supplies expected this year.

STREAMFLOW FORECASTS[a]
As of April 1, 1957

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1957	Forecast Period	15 yr.Avg. 1938-52	1957 as % of 15-Yr. Avg.
143	Burnt River near Hereford*	36.0	Apr.-Sept.	41.8	86
152	Powder River near Baker	64.0	Apr.-Sept.	63.4	101
152	Powder River near Baker	63.0	Apr.-July	61.6	102

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1957 1957	1956	1955	15 Yr. Avg. 1938-52	1957 as % of 15 Yr. Avg.
Unity	25.2	22.0	18.3	4.5	14.9	148

SNOW COVER
As of April 1, 1957

Snow Course No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	Water Contnet (In.) 1956	1955	15-Yr.Avg. 1938-52	1957 as % of 15-Yr. Avg.
---	below 5500' ---							
18E13	Blue Mtn. Summit	5098	24	7.6	10.1	8.2	15.8	48
17E1	Dooley Mtn.	5430	23	6.6	9.1	7.8	9.1**	73
18E3	Eilertson Mdws.	5400	27	9.5	13.7	11.4	11.9	80
18E20	Eldorado Pass	4600	0	0.0	0.0	1.6	--	
18E8	Gold Center	5340	39	12.8	15.9	10.9	11.9**	108
17D8	Schneider Mdws.	5400	81	30.3	33.6	24.0	29.9	101
18E9	Tipton	5100	28	9.6	11.9	10.8	9.7**	99
	Average		--	12.7	15.7	12.2	14.7	86
---	5500' to 6000'---							
18E14	Barney Creek	5950	25	7.3	8.8	6.7	9.4**	78
18E5	Bourne	5800	53	15.9	20.9	15.0	15.9	100
17D7	Taylor Green	5740	52	17.6	19.9	14.4	16.8	105
	Average		--	13.6	16.5	12.0	14.0	97
---	above 6000' ---							
18E1	Anthony Lake	7125	88	29.3	37.3	28.3	27.9	105
18E6	Goodrich Lake	6775	92	32.9	45.7	26.2	41.4**	79
18D10	Summit Springs	6000	67	20.9	28.4	19.1	21.1**	99
	Average		--	27.7	37.1	24.5	30.1	92
Average (12 courses)			--	16.7	21.3	15.2	18.4	91

*Partly estimated.
**Average for less than 15 years of record in 1938-52 period but not less than 5 years.

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1957
Lower Valleys	Good	Excellent
Upper Valleys		
Mountains		

PRECIPITATION DATA
1956-57

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal*	Avg. as % of Normal
Austin 3S	4333	.39	2.11	.46	1.84	1.84	2.35	3.97	1.85	1.95	95
Baker KBKR	3446	.42	3.15	.17[e]	.55	1.45	.72	1.52[e]	1.14	.85	134
Halfway	2675	.26	1.24	.43	2.82	2.22	2.62	3.84[e]	1.92	2.40	80
Huntington	2150	.63	4.01	.04	.99	.95	1.24	1.96	1.40	1.31	107
Richland	2215	.17	2.08	.24	1.23	1.74	.97[e]	1.48[e]	1.13	.95	119
Rock Creek	4150	.20	2.66	1.11	2.57	1.71	2.76	2.84	1.98	1.91	104
Unity	4031	.09	2.19	.15	1.10	.83	.85	1.90	1.02	1.00	102
Average		.31	2.49	.37	1.58	1.53	1.64	2.50	1.49	1.48	101
Average Normal*		.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		44	233	22	81	79	92	192			

Fall Avg. as % of Fall Normal (Sept-Oct-Nov) 94

* Based on USWB data [e] estimated

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1954

U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

Page

1 - 2 Water Supply Outlook: Below average water supplies for most areas with late season shortages expected for all except the earliest water rights. Storage water will be barely adequate this year.

2 Streamflow Forecasts: The Powder is forecast to flow 77 percent of the 10 year average and Burnt River 60 percent of average. Flow of North Powder, Eagle and Pine Creeks will be below average.

2 Reservoir Storage: Stored water in Unity and Thief Valley reservoir was reported as about average and satisfactory for this season.

3 Snow Cover: This year's snow-pack varies from 75 percent average on the Burnt to 88 percent average on Pine Creek. On the Powder the snow-cover is 85 percent average.

3 Soil Moisture: Soils up to 4000 feet are fairly dry. At higher elevations they have improved somewhat over the abnormally dry situation of last season.

4 Precipitation: Fall precipitation was 59 percent normal; while winter precipitation was 70 percent normal. September through March precipitation was 67 percent normal.

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

APRIL 1954

AGR.-SCS-PORTLAND, ORE. APRIL 1954

U.S. DEPARTMENT OF AGRICULTURE

PACIFIC REGION

SOIL CONSERVATION SERVICE

7-O-14467-L

WATER SUPPLY OUTLOOK - For April-September, 1954 [a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover is slightly below last year and average.
Big Creek	3,986	Only enough water for one irrigation. Snow-cover is 62 percent of last year 75 percent average.
Burnt River	27,448	Sufficient water for all lands except on the North fork where late season shortages will be experienced. Snow-cover is 75 percent average and only 61 percent of last year.
Clear Creek	3,570	Less irrigation water than last year. Snow-cover is about half of last year's cover.
Eagle and Goose	10,449	Less irrigation water than last year. Snow-cover is 69 percent of last year and 89 percent of average.
Fish Creek and Lake Forks	1,463	Less water than last year. Snow-cover is about half of last year's cover.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for one irrigation. Snow-cover is 79 percent of last year and 90 percent average.
McMullen Slough	1,800	Less water than last year for irrigation. Snow-cover is 69 percent of last year.
Pine Creek	11,381	Less irrigation water than last year. Snow-cover is 89 percent average and 69 percent of last year. Dry Gulch area will be short of water.
Pine (East) Creek	1,363	Less irrigation water than last year. Snow-cover is about half of last year's cover.
Powder River	43,980	Adequate for lands served from Thief Valley reservoir but short supplies for late water rights especially late in the season. Snow-cover is 85% percent average & 74 percent of last year.
Powder (North) River	18,146	Sufficient water for one irrigation. Snow-cover is 88 percent of last year and about 85 percent average.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Sufficient for one good irrigation on all lands. Late rights will suffer late in the season. Snow-cover is 66 percent of last year.
Salmon Creek	1,200	Sufficient water for one irrigation. Snow-cover is 79 percent of last year.
Spring Creek	290	Sufficient water for one irrigation only.
Wolf Creek	3,515	Sufficient water for one irrigation only. Snow-cover is 82 percent of last year.

STREAMFLOW FORECASTS[a] - As of April 1, 1954

Gaging Station No.	Name	Seasonal Streamflow- 1000 a.f. Forecast 1954 Apr:Sept.	Apr-July	Avg. 1942-51	1954 as % of Avg
143	Burnt River near Hereford*	27.0	— —	45.1	60
152	Powder River at Salisbury	50.0	— —	64.7	77
152	Powder River at Salisbury	— —	48.0	62.7	77

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1954 1954	1953	10 yr. Avg. 1942-51	1954 as % of yr.Avg.
Unity	25.2	15.4	14.9	13.7	112

SNOW COVER - As of April 1, 1954

Snow Course No.	Name	Elev.	1954 Snow Depth (in)	1954 Water Depth (in)	Water Content (in) 1953	Water Content (in) Average	1954 as % of Avg
-	below 5500'	-					
141	Blue Mtn. Sum.	5098'	15.5	5.3	10.0	7.8	68
156	Dooley Mtn.	5430'	14.7	4.4	11.6	9.2	48
151B	Eilertson Mdws.	5400'	30.8	10.2	15.4	12.1	84
249	Gold Center	5340'	31.8	12.5	15.5	12.2	102
161	Schneider Mdws.	5400'	66.4	27.0	39.3	30.5	89
142	Tipton	5100'	21.2	7.2	11.3	9.8	73
	Average		--	11.1	17.2	13.6	82
-	5500' to 6000'	-					
143	Barney Cr.	5950'	22.3	6.0	8.8	9.3	65
154	Bourne	5800'	40.2	15.8	20.6	16.0	99
185	Taylor Green	5740'	35.8	12.8	20.5	17.0	75
	Average		-	11.5	16.6	14.1	82
-	Above 6000'	-					
155	Anthony Lake	7125'	75.2	26.7	30.7	27.9	96
157	Goodrich Lake	6775'	91.3	38.1*	48.0	42.5	90
184	Summit Springs	6000'	49.7	16.6	18.6	21.4	78
	Average		-	27.1	32.4	30.6	89
	(Average 12 Snow Courses)			15.2	20.9	18.0	84

* Partly estimated

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1954
Lower Valleys	Fairly dry	Fairly dry
Upper Valleys	Fairly dry	Fairly dry
Mountains	Nearly Normal	Dryer than normal

PRECIPITATION DATA – As of April 1, 1954

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg	Normal*	Avg as % of Normal
Austin 3S	4333	0.01	1.23	2.63e	2.26e	2.73	0.96	0.71	1.50	1.95	77%
Baker WB City	3446	T	0.86	1.36	1.38	0.84	0.44e	0.72	0.80	1.17	68%
Halfway	2675	0.00	0.20	1.00	3.22	1.77	0.80	1.65	1.23	2.40	51%
Huntington	2150	0.00	0.20	0.91	2.02	1.27	0.40	0.75	0.79	1.31	60%
Richland	2215	T	0.25	0.97e	0.75	0.55e	0.20	0.48e	0.46	0.95	48%
Rock Creek	4150	0.11	0.81	2.34	2.71	3.80	1.32	1.15	1.75	1.91	92%
Unity	4031	0.02	0.58	0.81	0.88	0.92	0.39	0.43	0.58	1.00	58%
Average		0.02	0.59	1.43	1.89	1.70	0.64	0.84	1.02	1.53	67%
Normal*		0.72	1.10	1.63	2.03	1.99	1.84	1.35			
Average as % of Normal		3%	54%	88%	93%	85%	33%	62%			
Fall (Sep-Oct-Nov) as % of Normal		–	59%	–							

e–estimated

*–as published USWB

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1955

U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

S U M M A R Y

Page

1 & 2 Water Supply Outlook: "Poor" to "fair" supplies of water are forecast for most areas in these basins with late season shortages foreseen for all except the earliest water rights.

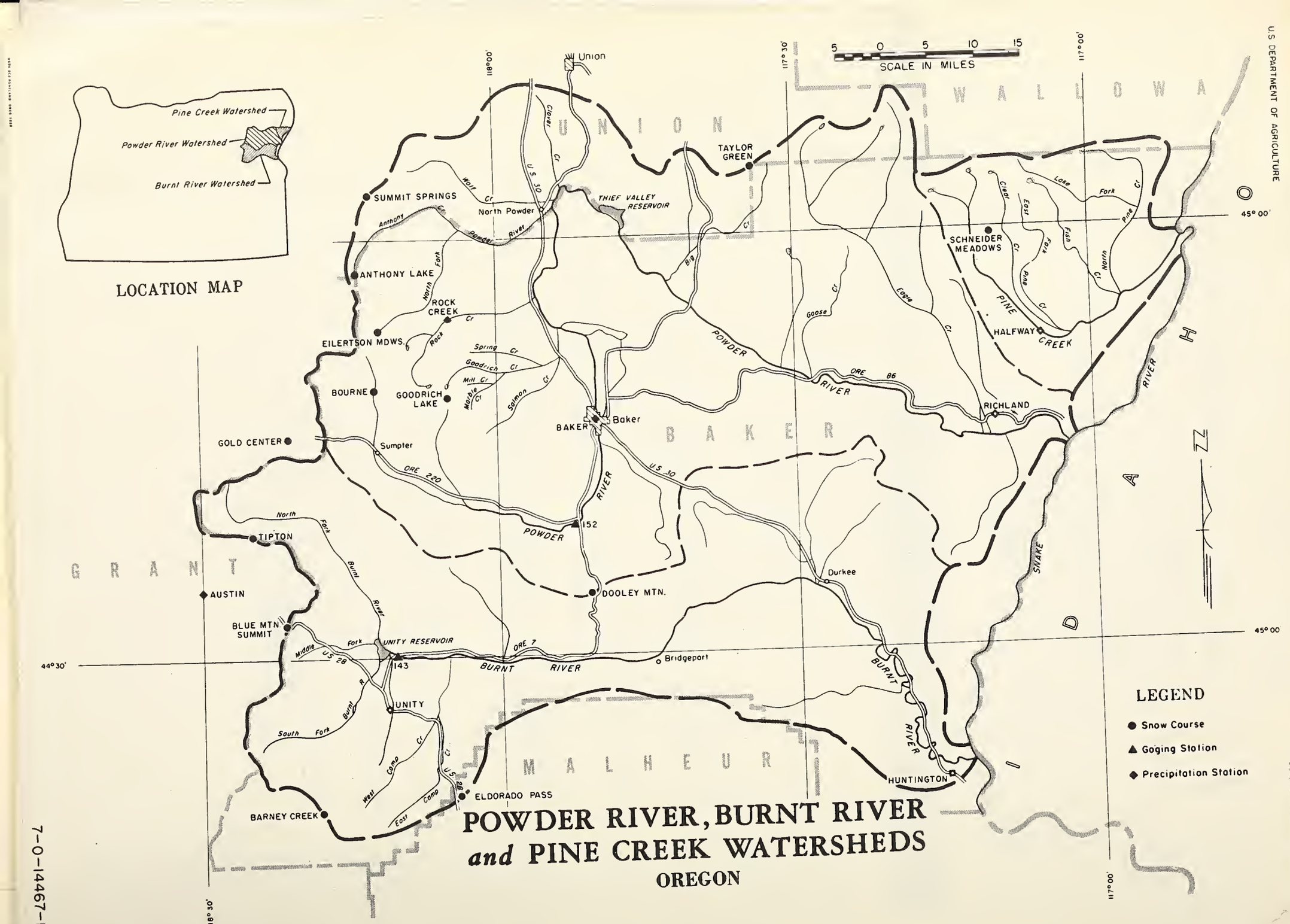
2 Streamflow Forecasts: The Powder is forecast to flow 59 percent of the 10 year average and Burnt River 52 percent of average. Flow of other streams will be proportionately low.

2 Reservoir Storage: Stored water in Unity is far below average and will not fill but should provide a sufficient supply to its users. Thief Valley reservoir is full as usual.

3 Snow-Cover: The snow-pack has a water content 94 percent average on the Burnt, 96 percent on the Powder, and 79 percent average on Pine Creek. All on very dry soils.

3 Soil-Moisture: All mountain watershed soils are extremely dry and will soak up much of the early snow-melt water.

4 Precipitation: Fall precipitation was 43 percent average and winter precipitation was 66 percent average. Abnormally heavy precipitation in early summer will be needed to improve the water outlook.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1955[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Sufficient water for one irrigation. Snow-cover greater than last year but watershed soils are exceptionally dry.
Big Creek	3,986	One irrigation is about all that is expected. Snow-cover slightly greater than last year.
Burnt River	27,448	Sufficient water for all lands except the North Fork if carefully used. Unity Reservoir holds a very limited supply but should provide enough for lands usually served.
Clear Creek	3,570	Less water available than for last year. Snow-cover is only 79 percent average.
Eagle and Goose	10,449	Less water than last year but no serious shortages foreseen this year.
Fish Creek and Lake Forks	1,463	Less water available than for last year Snow-cover about 89 percent of last year.
Marble Mill and Goodrich Creeks	2,780	Less water than last year but enough for one good irrigation in early season. Snow-cover is about same as last year.
McMullen Slough (Pine Valley below Langren)	1,800	Less water than last year but sufficient.
Pine Creek	11,381	Snow-cover about 89 percent of last year. Water supply less than last year. Dry Gulch area will be short early.
Pine (East) Creek	1,363	Less water than last year. Snow-cover is 79 percent average.
Powder River	43,980	Forecast streamflow at 59 percent average. Snow-cover good but soils are very dry. Thief Valley Reservoir has full supply of water.
Powder (North) River	18,146	Water about the same as last year except streamflow will fall off earlier than usual. Snow-cover little better than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for one good irrigation. Recent water rights will be short in late season. Snow-cover is some better than last year but watershed soils are all very dry.
Salmon Creek	1,200	Water for one good irrigation.
Spring Creek	290	Water for one good irrigation.
Wolf Creek	3,515	Enough water for one irrigation only. Snow-cover slightly better than last year.

STREAMFLOW FORECASTS[a]
As of April 1, 1955

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1955	Forecast Period	Avg. 1943-52	1955 as % of Avg.
143	Burnt River near Hereford*	24.0	Apr.-Sept.	46.5	52
152	Powder River at Salisbury	39.0	Apr.-Sept.	66.0	59
152	Powder River at Salisbury	38.0	Apr.-July	64.1	59

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1955 1955	1954	1953	10 Yr. Avg. 1943-52	1955 as % of 10 Yr. Avg.
Unity	25.2	4.5	15.4	14.9	12.9	35

SNOW COVER
As of April 1, 1955

Snow Course No.	Name	Elev.	1955 Snow Depth (in)	1955 Water Content (in)	Water Content (in) 1954	1953	Average	1955 as % of Avg.
---	below 5500' ---							
18E13	Blue Mtn. Sum.	5098'	30	8.2	5.3	10.0	7.7	106
17E1	Dooley Mtn.	5430'	25	7.9	4.4	11.6	8.9	89
18E3	Eilertson Mdws.	5400'	34	11.4	10.2	15.4	12.0	95
18E8	Gold Center	5340'	34	10.9	12.5	15.5	12.2	89
17D8	Schneider Mdws.	5400'	65	24.0	27.0	39.3	30.3	79
18E9	Tipton	5100'	28	10.8	7.2	11.3	9.7	111
	Average		--	12.2	11.1	17.2	13.5	90
---	5500' to 6000' ---							
18E14	Barney Cr.	5950'	22	6.7	6.0	8.8	8.9	75
18E5	Bourne	5800'	43	15.0	15.8	20.6	16.0	94
17D7	Taylor Green**	5740'	Report delayed		12.8	20.5	16.8	--
	Average		--	10.8	10.9	14.7	12.4	87
---	above 6000' ---							
18E1	Anthony Lake	7125'	71	28.5	26.7	30.7	27.9	102
18E6	Goodrich Lake	6775'	75	26.2	38.1*	48.0	41.9	63
18D10	Summit Springs**	6000'	Report delayed		16.6	18.6	21.1	--
	Average		--	27.4	32.4	39.4	34.9	79
	Average (10 Courses)			15.0	15.3	21.1	17.6	85

* Partly estimated. ** Omitted from averages.

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1955
Lower Valleys	Very dry	All watershed soils are still exception-
Upper Valleys	Very dry	ally dry except where early snow-melt
Mountains	Very dry	has wet top few inches.

PRECIPITATION DATA
1954-55

Station Name	Elev.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal *	Avg. as % of Norma.
Austin 3S	4333	0.15	0.50	0.83	2.01	1.32	1.30[e]	1.39	1.07	1.95	55
Baker KBKR	3446	0.68	0.25	0.39	1.05	0.17	0.70	0.79	0.58	0.85	68
Halfway	2675	0.76	0.29	0.98	3.81	1.50	1.73	1.73[e]	1.54	2.40	64
Huntington	2150	0.25	0.07	1.01	1.45	1.27	0.26	0.19	0.64	1.31	49
Richland	2215	0.31	0.10	0.54	0.88	1.18	0.64	0.65[e]	0.61	0.95	64
Rock Creek	4150	0.84	0.51	1.23	1.67	1.46	1.27	1.85	1.26	1.91	66
Unity	4031	0.16	0.24	0.23	0.65	0.47	0.24	0.71	0.39	1.00	39
Average		0.45	0.28	0.74	1.65	1.05	0.88	1.04	0.87	1.48	59
Average Normal*		0.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		64%	26%	46%	85%	54%	49%	80%			
Fall Avg. as % of Fall Normal (Sept-Oct-Nov)			43%								

* Based on USWB data

e - Estimated

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1956

U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

S U M M A R Y

For details
see page:

1-2 Water Supply Outlook: Good to ample water supplies are forecast for this entire area with soil moisture so great that runoff will be above the average expected from usual snow-melt.

2 Streamflow Forecasts: Powder River is forecast to produce one-third above average run-off during April-September. This figure is the 7th highest volume since records began in 1904. Burnt River will flow nearly one-half more than normal and will be the 4th highest flow since 1930. Flow of other streams will be much above average.

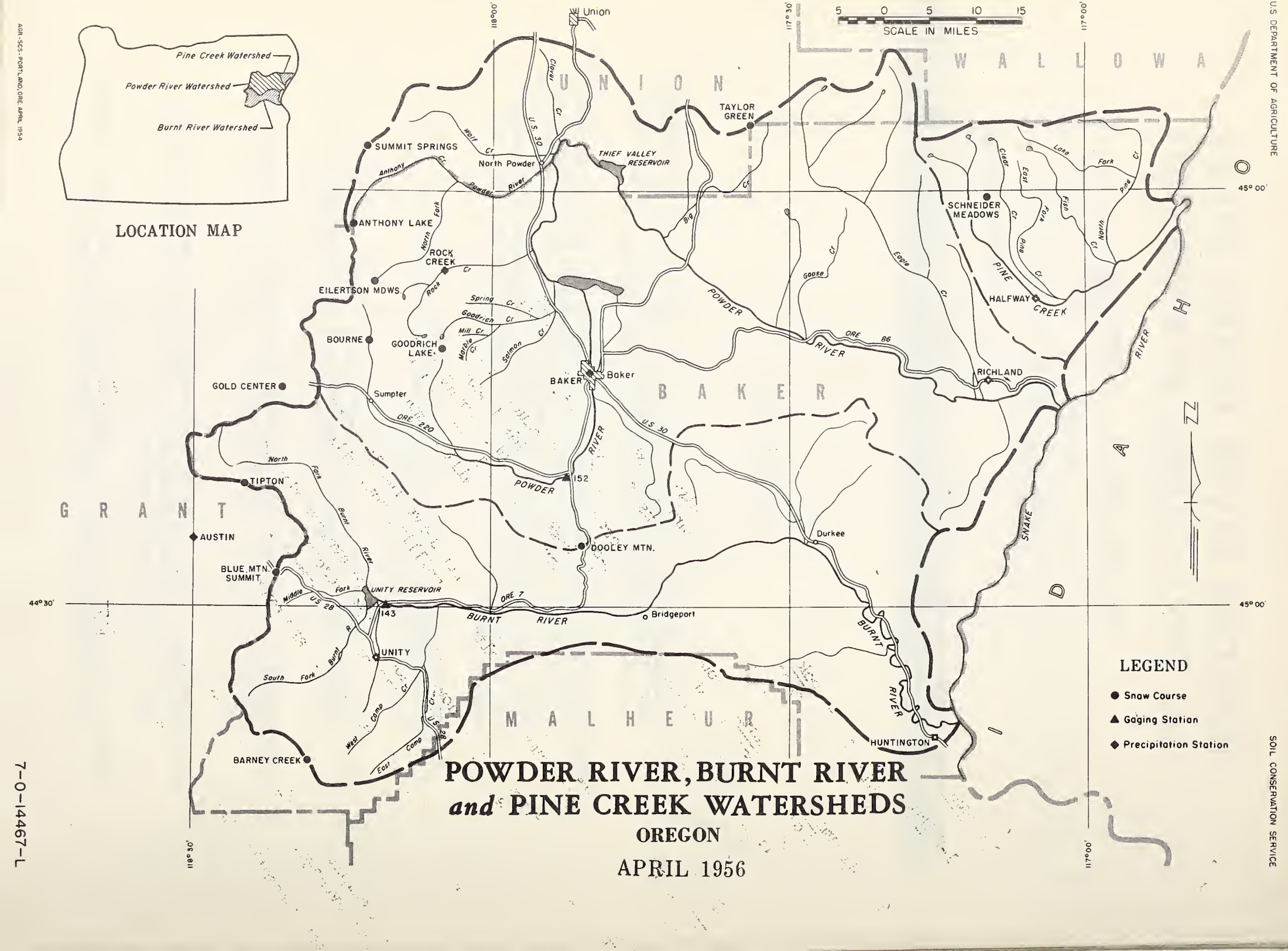
2 Reservoir Storage: Thief Valley reservoir w ill serve its lands up to capacity and Unity reservoir, although spilling now, will also have ample water supplies.

3 Snow-Cover: Water content of the snow-pack is above average throughout the area. On Powder River the snow is 126 percent average; on Burnt River and Pine Creek it is 112 percent average.

3 Soil Moisture: All soils in mountain watersheds are extremely wet and will cause snow-melt or rain-water to enter the streams rapidly.

4 Precipitation: Fall precipitation over the area was 137 percent of average. Total precipitation since September 1st has been about one-third above average.

Current Streamflow: Winter streamflow has been much above average with freshets occurring three times since January 1.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

APRIL 1956

AGR.-SCS-PORTLAND, ORE. APRIL 1954

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1956[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Ample water for all usual irrigation. Snow-cover is much above average.
Big Creek	3,986	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Burnt River	27,448	Adequate water for all usual irrigation. For lands served from Unity Reservoir the supply should be ample. Even the North Fork should have above average flow.
Clear Creek	3,570	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Eagle and Goose	10,449	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Fish Creek and Lake Forks	1,463	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Marble Mill and Goodrich Creeks	2,780	Adequate water for all usual irrigation. Snow-cover is much above that of last year.
McMullen Slough (Pine Valley below Langren)	1,800	Ample water for all usual irrigation. River flow to be one-third above average.
Pine Creek	11,381	Adequate water for all usual irrigation. Snow-cover is much better than last year. Dry Gulch area should have good supplies.
Pine (East) Creek	1,363	Adequate water for all usual irrigation. Snow-cover is much better than last year.
Powder River	43,980	Ample water for all usual irrigation. Flow of river will be one-third above average and will rank 7th highest since records began in 1904.
Powder (North) River	18,146	Ample water for all usual irrigation. Snow-cover is much better than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK -(Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for all usual irrigation. Late summer flow should hold up well. Snow-cover is better than last year.
Salmon Creek	1,200	Adequate water for all usual irrigation.
Spring Creek	290	Adequate water for all usual irrigation.
Wolf Creek	3,515	Adequate water for all usual irrigation. Snow-cover much above last year. Shaw Reservoir filled very early this year.

STREAMFLOW FORECASTS[a]
As of April 1, 1956

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1956	Forecast Period	15 yr Avg. 1938-52	1956 as % of 15-Yr. Avg.
143	Burnt River near Hereford*	61.0	Apr.-Sept.	41.8	146
152	Powder River at Salisbury	84.0	Apr.-Sept.	63.4	132
152	Powder River at Salisbury	82.0	Apr.-July	61.6	133

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1956 1956	1955	1954	15 Yr. Avg. 1938-52	1956 as % of 15 Yr. Avg.
Unity	25.2	18.3	4.5	15.4	14.9	123

SNOW COVER
As of April 1, 1956

Snow Course No.	Name	Elev.	1956 Snow Depth (In.)	1956 Water Content (In.)	Water Content (In.) 1955	1954	15 yr. Avg. 1938-52	1956 as % of 15-yr. Avg.
---	below 5500' ---							
18E13	Blue Mtn. Sum.	5098	28	10.1[a]	8.2	5.3	15.8	129
17E1	Dooley Mtn.	5430	27	9.1	7.9	4.4	9.1**	100
18E3	Eilertson Mdws.	5400	36	13.7	11.4	10.2	11.9	115
18E8	Gold Center	5340	39	15.9	10.9	12.5	11.9**	134
17D8	Schneider Mdws.	5400	80	33.6	24.0	27.0	29.9	112
18E9	Tipton	5100	32	11.9	10.8	7.2	9.7**	123
	Average		—	15.7	12.2	11.1	13.4	117
---	5500' to 6000' ---							
18E14	Barney Cr.	5950	25	8.9	6.7	6.0	9.4**	95
18E5	Bourne	5800	53	20.9	15.0	15.8	15.9	131
17D7	Taylor Green	5740	55	19.9	14.4	12.8	16.8	118
	Average		—	16.6	12.0	10.9	14.0	119
---	above 6000' ---							
18E1	Anthony Lake	7125	90	37.3	28.5	26.7	27.9	134
18E6	Goodrich Lake	6775	104	45.7	26.2	38.1*	41.4**	110
18D10	Summit Springs	6000	71	28.4	19.1	16.6	21.1**	135
	Average		—	37.1	21.3	32.4	30.1	123
	Average (12 Courses)		—	21.3	15.3	15.2	17.7	120

*Partly estimated. ** Average for less than 15 years of record in 1938-52 period but not less than 5 years.
[a]Telegraphic

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1956
Lower Valleys	At summer's end, last year, all mountain and valley soils were extremely dry. An unusual combination of heavy precipitation and early winter snow-melt has completely "recharged" all watersheds so that all soils are now extremely wet.	
Upper Valleys		
Mountains		

PRECIPITATION DATA
1955-1956

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal*	Avg. as % of Normal
Austin 3S	4333	1.30	1.43[e]	3.84	6.31	4.75	2.40	1.21	3.03	1.95	155
Baker KBKR	3446	0.99	1.03	1.93	3.46	1.15	0.73[e]	0.20	1.36	0.85	160
Halfway	2675	1.96	0.83	3.73	4.34	4.91	1.46	1.12	2.62	2.40	109
Huntington	2150	0.54	0.25	1.61	2.82	2.49	0.88	0.11	1.24	1.31	94
Richland	2215	0.95	0.40	2.34	1.67	1.45	0.86[e]	0.38[e]	1.15	0.95	121
Rock Creek	4150	1.00	2.10	3.70	6.20	3.80	3.13	1.23	3.02	1.91	158
Unity	4031	0.81	0.46	1.20	2.54	1.82	0.83	0.21	1.12	1.00	112
Average		1.08	0.93	2.62	3.90	2.91	1.47	0.64	1.94	1.48	131
Average Normal*		0.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		154	87	162	201	150	82	49			

Fall Avg. as % of Fall Normal (Sept-Oct-Nov) 137

* Based on USWB data [e] estimated

POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1957

U.S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

SUMMARY

For details
see page:

1-2 Water Supply Outlook: Fair to good water supplies are forecast for the entire area. The average amount of irrigation water can be expected.

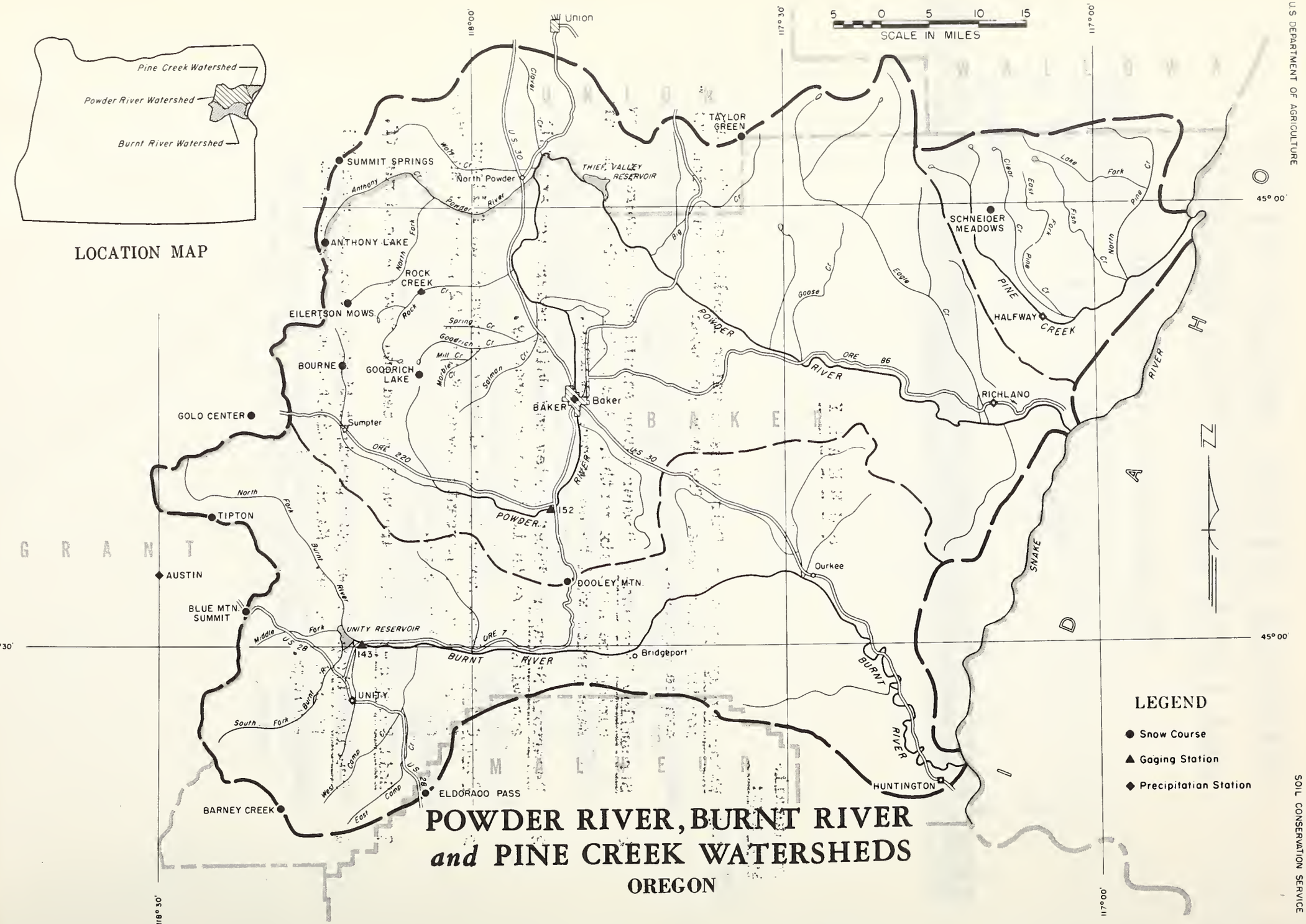
2 Streamflow Forecasts: Powder River should have an average flow during the next six months. Burnt River's flow during this same period will be 86 percent average.

2 Reservoir Storage: Thief Valley and Unity reservoirs are full and will serve their lands to capacity.

3 Snow-Cover: Snow cover is normal to near normal as follows: Burnt River, 92 percent; Powder River, 92 percent; and Pine Creek, 101 percent.

3 Soil Moisture: Soils are well wetted and favor a good runoff.

4 Precipitation: Water year precipitation to date has been 101 percent average. March precipitation was 192 percent average.



POWDER RIVER, BURNT RIVER *and* PINE CREEK WATERSHEDS

OREGON

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

M-1257B

7-O-14467-L

WATER SUPPLY OUTLOOK
For April-September, 1957[a]

Source of Water	Acreage Irrigated	Outlook
Anthony Creek	1,667	Adequate water for usual irrigation.
Big Creek	3,986	Adequate water for usual irrigation. Snow cover is slightly above normal.
Burnt River	27,448	Sufficient water for all lands serve from Unity reservoir. Some water shortages above the reservoir unless favorable rainfall occurs in May-August.
Clear Creek	3,570	Average water supplies expected this year.
Eagle and Goose	10,449	Average water supplies expected this year.
Fish Creek and Lake Forks	1,463	Average water supplies expected this year.
Marble, Mill and Goodrich Creeks	2,780	Sufficient water for at least one irrigation.
McMullen Slough (Pine Valley below Langren)	1,800	Sufficient for usual irrigation
Pine Creek	11,381	Average water supplies expected this year.
Pine (East) Creek	1,363	Average water supplies expected this year.
Powder River	43,980	Average water supplies for usual irrigation. Thief Valley reservoir is full.
Powder (North) River	18,146	Adequate water supplies. Snow-cover less than last year.

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK - (Contd.)

Source of Water	Acreage Irrigated	Outlook
Rock Creek	9,902	Enough water for at least one good irrigation.
Salmon Creek	1,200	Enough water for at least one good irrigation.
Spring Creek	290	Enough water for at least one good irrigation.
Wolf Creek	3,515	Average water supplies expected this year.

STREAMFLOW FORECASTS[a]
As of April 1, 1957

Gaging Station No.	Name	Seasonal Streamflow in 1000 a.f. Forecast 1957	Forecast Period	15 yr.Avg. 1938-52	1957 as % of 15-Yr. Avg.
143	Burnt River near Hereford*	36.0	Apr.-Sept.	41.8	86
152	Powder River near Baker	64.0	Apr.-Sept.	63.4	101
152	Powder River near Baker	63.0	Apr.-July	61.6	102

* Corrected to natural flow

RESERVOIR STORAGE

Reservoir	Usable Capacity 1000 a.f.	Thousand a.f. in storage about April 1, 1957 1957	1956	1955	15 Yr. Avg. 1938-52	1957 as % of 15 Yr. Avg.
Unity	25.2	22.0	18.3	4.5	14.9	148

SNOW COVER
As of April 1, 1957

Snow Course No.	Name	Elev.	Snow Depth (In.)	Water Content (In.)	Water Contnet (In.) 1956	1955	15-Yr.Avg. 1938-52	1957 as % of 15-Yr. Avg.
---	below 5500' ---							
18E13	Blue Mtn. Summit	5098	24	7.6	10.1	8.2	15.8	48
17E1	Dooley Mtn.	5430	23	6.6	9.1	7.8	9.1**	73
18E3	Eilertson Mdws.	5400	27	9.5	13.7	11.4	11.9	80
18E20	Eldorado Pass	4600	0	0.0	0.0	1.6	--	
18E8	Gold Center	5340	39	12.8	15.9	10.9	11.9**	108
17D8	Schneider Mdws.	5400	81	30.3	33.6	24.0	29.9	101
18E9	Tipton	5100	28	9.6	11.9	10.8	9.7**	99
	Average		--	12.7	15.7	12.2	14.7	86
---	5500' to 6000'---							
18E14	Barney Creek	5950	25	7.3	8.8	6.7	9.4**	78
18E5	Bourne	5800	53	15.9	20.9	15.0	15.9	100
17D7	Taylor Green	5740	52	17.6	19.9	14.4	16.8	105
	Average		--	13.6	16.5	12.0	14.0	97
---	above 6000' ---							
18E1	Anthony Lake	7125	88	29.3	37.3	28.3	27.9	105
18E6	Goodrich Lake	6775	92	32.9	45.7	26.2	41.4**	79
18D10	Summit Springs	6000	67	20.9	28.4	19.1	21.1**	99
	Average		--	27.7	37.1	24.5	30.1	92
	Average (12 courses)		--	16.7	21.3	15.2	18.4	91

*Partly estimated.
**Average for less than 15 years of record in 1938-52 period but not less than 5 years.

SOIL MOISTURE

Soils in:	Fall Status	Current status as of April 1, 1957
Lower Valleys	Good	Excellent
Upper Valleys		
Mountains		

PRECIPITATION DATA
1956-57

Station Name	Elev.	Precipitation (inches) Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.	Avg. Normal*	Avg. as % of Normal
Austin 3S	4333	.39	2.11	.46	1.84	1.84	2.35	3.97	1.85	1.95	95
Baker KBKR	3446	.42	3.15	.17e	.55	1.45	.72	1.52e	1.14	.85	134
Halfway	2675	.26	1.24	.43	2.82	2.22	2.62	3.84e	1.92	2.40	80
Huntington	2150	.63	4.01	.04	.99	.95	1.24	1.96	1.40	1.31	107
Richland	2215	.17	2.08	.24	1.23	1.74	.97e	1.48e	1.13	.95	119
Rock Creek	4150	.20	2.66	1.11	2.57	1.71	2.76	2.84	1.98	1.91	104
Unity	4031	.09	2.19	.15	1.10	.83	.85	1.90	1.02	1.00	102
Average		.31	2.49	.37	1.58	1.53	1.64	2.50	1.49	1.48	101
Average Normal*		.70	1.07	1.62	1.94	1.94	1.79	1.30			
Avg. as % of Normal		44	233	22	81	79	92	192			

Fall Avg. as % of Fall Normal (Sept-Oct-Nov) 94

* Based on USWB data e estimated